

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		<b>See form PCT/ISA/210</b> <i>(day/month/year)</i>
Applicant's or agent's file reference <b>R. 305573 H1/Os</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/DE2004/001997</b>	International filing date ( <i>day/month/year</i> ) <b>08.09.2004</b>	Priority date ( <i>day/month/year</i> ) <b>24.11.2003</b>
International Patent Classification (IPC) or both national classification and IPC <b>F02M45/08, F02M61/16</b>		
Applicant <b>ROBERT BOSCH GMBH</b>		

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP	Authorized officer
Facsimile No.	Telephone No.

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Box No. I	Basis of this opinion
	<p>1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).</p> <p>2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> in written format</p> <p><input type="checkbox"/> in computer readable form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input type="checkbox"/> filed together with the international application in computer readable form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p> <p>3. <input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p> <p>4. Additional comments:</p>

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Box No. V	<u>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement</u>	
<b>1. Statement</b>		
Novelty (N)	Claims <u>4 - 9</u>	YES
	Claims <u>1 - 3</u>	NO
Inventive step (IS)	Claims    _____	YES
	Claims <u>1 - 9</u>	NO
Industrial applicability (IA)	Claims <u>1 - 9</u>	YES
	Claims    _____	NO
<b>2. Citations and explanations:</b>		
<p>1       WO 03 040543 A (D1) (cf. figures 1-3) discloses a fuel injection device, in particular for an internal combustion engine having direct fuel injection, having a housing (1) and at least two valve elements (5, 7) which are arranged in the housing (1), are coaxial with respect to one another and are in each case assigned at least one fuel outlet opening (14, 12), wherein a first sealing region (32) is provided on the outer valve element (5) radially outwards from the at least one fuel outlet opening (14) which is assigned thereto, said first sealing region (32) interacting with a valve seat (10) on the housing and being capable of separating the at least one fuel outlet opening (14) from a high pressure connection (16), wherein an additional sealing region (30) is provided on the outer valve element (5) between the at least one fuel outlet opening (14) which is assigned thereto and the inner valve element (7).</p> <p>1.1      The subject matter of claim 1 is therefore not novel (PCT Article 33(2)).</p>		

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Box No. V      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1.2 Dependent claims 2-8 do not appear to contain any additional features which, in combination with the features of any claim to which claims 2-8 refer back, meet the PCT requirements for novelty or inventive step, because the subject matter of claims 2, 3 is known from D1 and the subject matter of claims 4-8 concerns a minor structural modification to the fuel injection device as per D1, of the kind that a person skilled in the art routinely makes on the basis of familiar considerations.

1.3 The features of independent claim 9 relate to an obvious method for producing an injection valve, of the kind that a person skilled in the art could arrive at without thereby being inventive.

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

2 Contrary to PCT Rule 5.1(a) (ii), the description does not cite D1 or indicate the relevant prior art disclosed therein.

2.1 The description is not consistent with the claims (PCT Rule 5.1(a) (iii)).